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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,996	09/19/2005	Joji Fujiwara	MAT-8744US	1009

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EXAMINER	
CRAWFORD, LATANYA N	
ART UNIT	PAPER NUMBER
2813	
MAIL DATE	DELIVERY MODE
08/31/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/549,996	FUJIWARA ET AL.	
	Examiner	Art Unit	
	LATANYA CRAWFORD	2813	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) *4,7 and 9* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,6,8 and 10-27* is/are rejected.

7)☒ Claim(s) *2,3 and 5* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 September 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *05/06/2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the correspondence filed on 05/22/2009. Currently, claims 1-3, 5-6, 8, 10-27 are pending. Claims 4, 7, & 9 have been canceled.

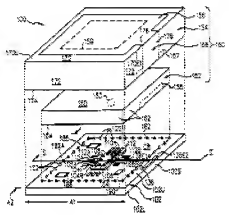
Claim Rejections - 35 USC § 103

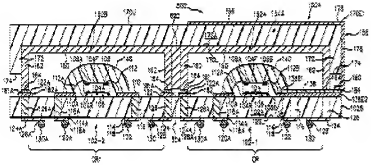
2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 6, 8-16, 21- 23, & 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mathews (US Patent 6,686,649 B1) in view of Asahi (US Pub no. 2003/0090883 A1).

Regarding claim 1, Mathews et al. discloses a module component comprising: a substrate (102) a partition (620) formed on the substrate (102) (column 3, lines 30-35; column 12, lines 18-25), the partition (620)having a predetermined height to divide the substrate into a plurality of circuit blocks fig. 8; a first sealing member (140-left) covering a first circuit block of the plurality of circuit
blocks; a second sealing member (140-right) covering a second circuit block of the plurality of circuit blocks fig. 8 (column 5, lines 54-65);





a first conductive film (152b) covering at least a surface of the first sealing member and being continuous from the partition to the substrate *(view fig. 1);* and a second conductive film (152 a) covering at least a surface of the second sealing member and being continuous from the partition to the substrate (in view of fig. 1; column 5, lines 54-65; column 6, lines 13-19)(examiner notes that the traces are apart of the substrate; therefore the conductive films are continuous to the substrate); wherein the plurality of circuit blocks are electrically shielded individually but fails to teach the partition is made of a composition of a resin and an electrically conductive material.

However, Asahi et al. teaches the partition is made of a composition of a resin and an electrically conductive material [0045]. It would have been obvious tone of

ordinary skill in the art at the time the invention was made to modify Mathews et al. with the partition is made of a composition of a resin and an electrically conductive material as taught by Asahi et al. since the substitution of one known element for another would have yielded predictable results to one of ordinary skill in the art. (KSR at 1395 (*citing United States v. Adams*, 383 US 39, 50-51(1996)) and furthermore the substitution would provide properties of small migration and high electrical conductivity.

Regarding claim 6, Mathews et al. discloses the partition (620) having a metal film on an outer surface thereof (view fig. 8). Asahi et al. discloses that the partition is resin [0045]. However, Mathews et al. as modified by Asahi fails to teach a square cross section in a longitudinal direction. The shape of the partition is a matter of design choice where a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the partition was significant. In re Dailey 357 F.2d 669.149 USPQ 47 (CCPA 1966).

Regarding claim 8, Mathews et al. discloses the partition (620) has a conductive wall in a direction vertical to the substrate (102) fig. 8.

Regarding claim 10, Mathews et al. discloses wherein the partition (165) has resin (170) at least one side surface thereof fig. 8 (column 6, lines 20-30).

Regarding claim 11, Mathews et al. discloses the partition (620) is positioned inside the substrate (102) fig. 8 except for having a planar shape of one of a circle and a polygon. The shape of the partition is a matter of design choice where a person of ordinary skill in the art would have found obvious absent persuasive evidence that the

particular configuration of the partition was significant. In re Dailey 357 F.2d 669.149 USPQ 47 (CCPA 1966).

Regarding claim 12, Mathews et al. discloses the partition (620) is positioned out of contact with an outer edge of the substrate fig. 8.

Regarding claim 13, Mathews et al. discloses wherein the partition (620) has a planar shape fig. 8 but fails to teach of a letter T. The shape of the partition is a matter of design choice where a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the partition was significant. In re Dailey 357 F.2d 669.149 USPQ 47 (CCPA 1966).

Regarding claim 14, Mathews et al. discloses the first conductive film and the second conductive film 152b/152a include metal (column 6, lines 4-11).

Regarding claim 15, Mathews et al. discloses wherein the partition (620) is higher than an electric component (104) mounted on the substrate (102) fig. 8.

Regarding claim 16, Mathews et al. discloses the substrate (102) has a ground pattern (122) on a surface thereof, and the ground pattern is connected with the first conductive film and the second conductive film (152 a/152b) fig. 8.

Regarding claim 21, Mathews et al. discloses wherein the first and second conductive films (152b/152a) are separated by the partition (620) fig. 8.

Regarding claim 22, Mathews et al. discloses wherein the partition (620) electrically connects the first conductive film (152b) and the second conductive film (152a) (column 12, lines 18-24).

Regarding claim 23, Mathews et al. discloses wherein the first conductive film and the second conductive film have ends which face the partition and which are separated by the partition (fig. 8).

Regarding claim 26, Mathews et al. discloses wherein the first conductive film (152b) covers at least a portion of a top surface and a side surface of the first sealing member (140) and the second conductive film (152a) covers at least a portion of a top surface and a side surface of the second sealing member fig. 8.

2. Claims 17, 18, 20, 24, 25, & 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mathews (US Patent 6,686,649 B1) in view of Asahi (US Pub no. 2003/0090883 A1).

Regarding claim 17, Mathews et al. discloses a method for manufacturing a module component having a plurality of circuit blocks shielded individually, the method comprising: a step of mounting a partition (620) higher than mounting components (104), the partition dividing the mounting components and a substrate (102) into a plurality of circuit blocks on the substrate fig, 8 (column 5, lines 54-65); a step of forming a first sealing member (140-left) covering a first circuit block of the plurality of circuit blocks individually in such a manner as to be higher than the mounting components; a step of forming a second sealing member (140- right) covering a second circuit block of

the plurality of circuit blocks individually in such a manner as to be higher than the mounting components (104); a step of forming a first conductive film (152b) on a surface of the first sealing member; and a step of forming a second conductive film (152a) on a surface of the second sealing member (column 5, lines 54-65) except for the order of forming the first and second sealing members after the step of mounting the partition. The selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results); In re Gibson, 39 F.2d 975, 5USPQ 230 (CCPA 1930) Mathews et al. further fails to teach the partition having a composition of resin and an electrically conductive material.

However, Asahi et al. teaches the partition is made of a composition of a resin and an electrically conductive material [0045]. It would have been obvious tone of ordinary skill in the art at the time the invention was made to modify Mathews et al. with the partition is made of a composition of a resin and an electrically conductive material as taught by Asahi et al. since the substitution of one known element for another would have yielded predictable results to one of ordinary skill in the art. (KSR at 1395 (*citing United States v. Adams*, 383 US 39, 50-51(1996)) and furthermore the substitution would provide properties of small migration and high electrical conductivity.

Regarding claim 18, Mathews et al. discloses wherein the partition (620) contains a conductive material formed in a direction vertical to the substrate; and the step of forming a first sealing member (140) fig. 8 (column 5, lines 5-65; column 12, lines 20-25).

Regarding claim 20, Mathews et al. discloses wherein the step of forming a first conductive film (152b) or the step of forming a second conductive film (152a) includes a step of connecting the respective conductive film with a ground pattern (122) fig. 8.

Regarding claim 24, Mathews et al. discloses wherein the first conductive film (152b) have ends which face the partition and which are separated by the partition (620) fig. 8.

Regarding claim 25, Mathews et al. discloses the step of forming the first and second conductive films include forming continuous first and second conductive films from the parttion (620) to the substrate (102) (in view of fig. 1; column 5, lines 54-65; column 6, lines 13-19)(examiner notes that the traces are apart of the substrate; therefore the conductive films are continuous to the substrate)

Regarding claim 27, Mathews et al. discloses wherein the step of forming a first conductive film (152b) includes covering at least a portion of a top surface and a side surface of the first sealing member (140) with the first conductive film and the step of forming a second conductive film (152a) includes covering at least a portion of a top surface and a side surface of the second sealing member (140) with the second conductive film fig. 8 column 5, lines 54-65.

2. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mathews (US Patent 6,686,649 B1) in view of Asahi (US Pub no. 2003/0090883 A1 as applied to claim 17, and further in view of Ohmi (US Pub no. 2006/0158865 A1).

Regarding claim 19, Mathews et al. as modified by Asahi et al. discloses all the claim limitations of claim 17. Asahi et al. further teaches a step of removing the conductive material (202) formed in a top of the partition (203) by etching [0052] but fails to teach by one of dicing and laser.

However, Ohmi et al. teaches by laser [0152]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the etching process of Asahi et al. with regards to Mathews et al. & Asahi et al. with removal by laser as taught by Ohmi et al. since patterning conductive material by laser is conventionally known in semiconductor fabrication.

Allowable Subject Matter

3. Claims 2, 3, & 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The limitations required in claim 2: wherein the substrate is made of resin; and the first sealing member, the second sealing member and the partition contain a same resin was not found in prior art.

5. Claim 5 is objected to because it depends from claim 2.

6. The limitations required in claim 3 of: the composition is made of ceramic powder-containing resin and conductive material; in combination with wherein the substrate is ceramic; and the first sealing member, the second sealing member and the partition contain a same resin was not found in prior art.

Response to Arguments

3. Applicant's arguments with respect to claims 1-3, 5-6, 8, 10-24 have been considered but are moot in view of the new ground(s) of rejection.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LATANYA CRAWFORD whose telephone number is (571)270-3208. The examiner can normally be reached on Monday-Friday 7:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Landau can be reached on (571)-272-1731. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LaTanya Crawford/
Examiner, Art Unit 2813

/W. David Coleman/
Primary Examiner, Art Unit 2823